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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,886	10/21/2003	Rodney George Wade	CULLE-14	2767

23599 7590 01/23/2008  
MILLEN, WHITE, ZELANO & BRANIGAN, P.C.  
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ARLINGTON, VA 22201

EXAMINER
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PRICE, CRAIG JAMES

ART UNIT	PAPER NUMBER
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3753

MAIL DATE	DELIVERY MODE
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01/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

SJ

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/688,886	WADE, RODNEY GEORGE	
	<b>Examiner</b>	<b>Art Unit</b>	
	Craig Price	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. In view of the Supplemental Appeal Brief filed on 10/23/2007, and the Appeal Conference held on 1/17/2008 with Greg Huson and Robin Evans, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.



GREGORY HUSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

**STATUS OF CLAIMS**

2. Claims 1-9 remain, with action on the merits found below, claim 10 is cancelled.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,2,3,5,8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wade (AU-B-16551/95).

Regarding claims 1,2,3,5,8 and 9, Wade discloses a first flush water diverter comprising a T-piece (6) with associated rainwater collection chamber, which T-piece is adapted for connection in a rainwater flow path to intercept the flow of rainwater from a roof into a downpipe or directly to a storage or usage area, the collection chamber (1) including a float (5) which seals on a seat adjacent a T-piece inlet to the collection chamber when the collection chamber is charged with rainwater and having a diameter which is an integral multiple of the diameter of the T-piece inlet, the collection chamber is a pvc tube having a diameter of approximately 300 mm (Col. 6, Lns. 1-5), the pvc tube has a length of between about 225 mm and 2005 mm (Col. 6,14-19), and wherein the collection chamber includes an outlet and associated flow control valve (12) to

regulate the flow of diverted rainwater from the collection chamber, and wherein a hose connection (11) is fitted to the flow control valve as shown in Figure 1, wherein a filter screen (15,16) is provided at the outlet as seen in Figure 2, wherein the float is a ball which freely floats on the surface of the rainwater which collects in the collection chamber as shown in Figure 5 and in (Col. 4, Lns. 2 and 3), and a collection chamber having a capacity defined by the equation in the form of fall pipe volumes of 5 to 100 litres (Col. 6, Lns. 6-14).

First,

Wade is silent to the claimed limitation regarding an integral multiple other than one.

At the time the invention was made it would have been an obvious matter of design choice to one of ordinary skill in the art to utilize a pipe diameter with an integral multiple other than one, since such items are readily available.

Secondly,

Wade is silent to the claimed limitation regarding the rainwater carrying capacity formula and pollution factor, "the said collection chamber having a rainwater carrying capacity defined by the formula:  $DF = RA \times PF \times 1000$  where DF is the rainwater carrying capacity, or diversion factor, measured in litres, RA is tile associated roof area measured in square metres, PF is the Pollution Factor for the roof location which is determined on site and varies between 0.0005 for light pollution locations and 0.002 for heavy pollution locations".

Wade discloses on page 6, lines 6 – 19, that tests were conducted "to optimise the dimensions of the apparatus exemplified above for use in a domestic water collection system", with consideration given for the roof area and for a pollution factor, "To simulate bird and animal droppings, plastic beads and styrene shapes of equivalent density were used". Wade therefor discloses the optimization of a rainwater diverter tank on the basis of foreign matter in the equation and a roof area, therefore it would have been obvious for a skilled artisan to optimize the size of the collection chamber based on the roof size and environmental surroundings based on some type of relative location for instance in heavy or light pollution areas, in order to determine the size of the collection chamber.

5. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wade (AU-B-16551/95) in view of Sill (US 1,460,613).

Regarding claims 4 and 6, Wade teaches all of the claimed invention, but is silent to having the collection chamber is adapted for support on a stand or for connection to a wall or post and is silent to having a conical cap connecting the T-piece to the collection chamber.

Firstly, Sill teaches the use of a rain water supply system on a stand, as seen in Figures 1 and 2.

In view of the Sill patent, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the collection chamber of Wade with the stand of

Sill in order to provide a collection chamber which would be out of the reach of small children for safety concerns.

Secondly, Sill teaches the use of a conical cap (17, the cone shape is estimated to have an included angle of about 160 degrees, shown best in figure 3) connecting the T piece (10) to the collection chamber, as shown in Figure 2.

In view of the Sill patent, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the collection chamber of Wade with the conical cap of Sill, in order to provide a collection chamber cap that extends the life of the chamber by not rusting as quickly as a surface which were flat.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wade (AU-B-16551/95) in view of Wallis (US 5,407,091).

Regarding claim 7, Wade teaches all of the claimed invention, but lacks a conical receptacle is fitted to the lower end of the collection chamber which houses the outlet. Wallis teaches the use of a conical receptacle is fitted to the lower end of the collection chamber, which houses the outlet, as shown in Figure 2.

In view of the Wallis patent, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the collection chamber of Wade with the conical receptacle of Wallis, in order to provide a chamber which would drain out all of the possible rainwater due to the conical shape.

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712.

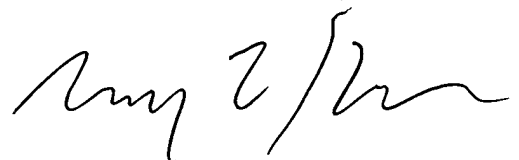
The examiner can normally be reached on 7AM - 5:30PM M-R.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP



17 January 2008



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